

M e m o r a n d u m

To: Panel Members

Date: September 22, 2006

From: Creighton Chan, Manager

Analyst: T. Teles

Subject: One-Step Agreement for **STRYKER ENDOSCOPY**

CONTRACTOR:

- Training Project Profile: Retraining: Companies W/Out-Of-State Competition
- Legislative Priorities: Stimulating Exports/Imports
Promotion Of California's Manufacturing Workforce
- Type of Industry: Manufacturing
- Repeat Contractor: Yes
- Contractor's Full-Time Employees
 - *Worldwide:* 17,265
 - *In California:* 542
- ETP Trainees Represented by Union: No
- Name and Local Number of Union Representing ETP Trainees: N/A

CONTRACT:

- Program Costs: \$486,972
- Substantial Contribution: \$0
- Total ETP Funding: \$486,972
- Total In-kind Contribution: \$533,619
 - *Trainee Wages Paid During Training:* \$533,619
 - *Other Contributions:* \$0
- Reimbursement Method: Fixed-Fee
- County(ies) Served: Santa Clara

INTRODUCTION:

Founded in 1981 in San Jose, California, Stryker Endoscopy is a manufacturer of medical devices and surgical equipment used in operating theaters worldwide. Stryker Endoscopy is a subsidiary of the Stryker Corporation, founded in 1941 in Michigan. Stryker Endoscopy offers a broad range of products used in minimally invasive surgery in operation room environments. Its products combine voice activation, infrared technology and high definition capture and display devices creating fully integrated operating rooms that are used in sports medicine, arthroscopic, and laparoscopic surgical procedures to treat medical conditions such as osteoarthritis, fracture, back injury, spinal surgery, and joint replacement.

This is the second project for Stryker Endoscopy. In this proposal, the company seeks funding to retrain 501 California employees in the skills necessary to stay competitive and move into new markets. Products and technologies change rapidly in the medical device marketplace and Stryker Endoscopy must provide training in the new technologies. In addition, the company is introducing a new Enterprise Resource Planning (ERP) System (Endora) that will integrate manufacturing, logistics, sales, marketing, finance, and accounting. Also, Stryker Endoscopy acquired two new companies, Etrauma in 2005 and SpineCore Inc. in 2004, which must be integrated into Stryker Endoscopy's production and business systems. The company qualifies for standard ETP funding as a manufacturing company facing out-of-state competition under Title 22 California Code of Regulations, Section 4416(b).

MEETING ETP GOALS AND OBJECTIVES:

Stryker Endoscopy proposes training that will further the following ETP goals and objectives:

- 1) The prospective Contractor is a manufacturer of medical devices and thus meets ETP's legislative mandate to promote the retention of manufacturing jobs within California.
- 2) Training is targeted to frontline workers which meets ETP's legislative mandate to invest in developing the skills of frontline workers and to foster job retention in high-wage, high-skilled jobs.

TRAINING PLAN TABLE:

Grp/Trainee Type	Types Of Training	No. Retain	No. Class/Lab Videocnf. Hrs.	No. CBT Hrs.	Cost Per Trainee	Hourly Wage After 90 Days
Job Number 1 Retraitees	MENU: Advanced Technology Computer Skills Continuous Improvement Manufacturing Skills	501	24 - 200	0 - 200	\$972	*\$12.90 - \$95.00
Wages After 90-Day Retention						
<u>Occupation</u> Administration/Business Staff Engineer/Technical Staff Production Staff Director Manager Supervisor						
<u>Health Benefits Used To Meet ETP Minimum Wage:</u> *Health Benefits of at least \$2.62 per hour may be used to meet the ETP minimum wage of \$12.90 for retrainees in Santa Clara County.					<u>Turnover Rate</u> 10.2%	<u>% Of Mgrs & Supervisors To Be Trained:</u> 9.7%
<u>Other Employee Benefits:</u> In addition to employer-paid medical, dental, and vision benefits, Stryker Endoscopy offers vacation, sick leave, life insurance, and a 401K plan.						

COMMENTS / ISSUES:

➤ ***Frontline Workers***

All participants in this project meet the Panel definition of frontline workers under Title 22 California Code of Regulations, Section 4400(ee) except for 49 directors, managers and supervisors that do not set company policy.

➤ ***Production During Training***

The proposed Contractor agrees that during ETP-funded training hours, trainees will not produce products or provide services which will ultimately be sold.

COMMENTS / ISSUES: (continued)

➤ ***Advanced Technology***

Stryker Endoscopy is requesting the higher reimbursement rate for a portion of the training related to the Endora system. According to the company representatives, the Endora system will require major changes to most of Stryker Endoscopy's processes and will require key users and engineers to be knowledgeable in programming, systems configuration, system management, customization and system logistics; and will required the remaining staff to learn to utilize the system for their individual job functions. Twenty-five individuals will receive between 20 and 50 hours of Advanced Technology training and they will then provide training to the rest of the staff who will receive between four and twelve hours of Advanced Technology training. The company reports that the cost for a 40-hour course for key users is \$3,000 per employee and other courses will be between \$1,000 and \$2,500 per employee. The equipment and computers are extremely technical in nature and require a lower ratio of trainer to trainee. Stryker will provide an additional 4,018 hours of AT at a cost of \$96,432. Stryker Endoscopy agrees to conform to the 10 trainees per trainer required by ETP for Advanced Technology training. Because of the sophisticated specifications, highly technical processes, advanced software application, and high cost to deliver the training, Panel staff recommends that the company receive the AT reimbursement rate for apportion of its ETP-funded training program.

RECOMMENDATION:

Staff recommends that the Panel fund this training because it supports economic growth in California of a company in the medical technology industry. In addition, a highly skilled workforce will result in the retention and creation of high wage jobs as Stryker Endoscopy California sites become more competitive and moves the company into new markets globally.

NARRATIVE:

Company representatives state that the demand for new technology is being driven by demographic trends as the baby-boom generation comes into the age for orthopedic and other medical procedures. Stryker Endoscopy acquired Eutrama, a digital imaging and electronic medical record technology company and SpineCore, Inc., a disc/vertebral device and replacement technology company to expand its product line and markets. Both companies offer new technologies that must be integrated into the company's manufacturing systems and processes. Stryker Endoscopy is also implementing a new ERP system, Endora, that will enable the company to respond to customer and market demands more rapidly and provide better customer service. According to the prospective Contractor, its ability to manage growth in the future is dependent upon training its workforce in computer skills, continuous improvement skills, manufacturing skills, and advanced technology. Since the last project was developed, Stryker Endoscopy has gone through several technology changes and new customer and industry requirements. In addition, the enterprise resource system, Endora, will change all the processes and reporting requirements for all departments. This training project will focus on technical training pertaining to new technologies, integrating the two new companies, and the Endora system.

NARRATIVE: (continued)

Computer Skills: To keep pace with customer demands and to maintain a leadership role in the marketplace, Stryker Endoscopy must modernize business practices and upgrade employee skills with training in computer hardware, software and networking. Implementing the new Endora system will involve providing training throughout the organization as all employees will be using the Endora system for some aspect of their jobs.

Manufacturing Skills: The manufacturing training in the ETP project will provide training in new medical technologies, digital imaging and communications systems. The production staff do not currently possess the skills necessary to use the equipment and materials required to produce the new products and must be cross-trained in the various product lines, processes, and machinery. The training will result in a more efficient workforce that can respond to customer demands on a timely basis.

Continuous Improvement Skills: The medical device field continues to be highly competitive and Stryker Endoscopy must continue the implementation of its quality improvement program. The company provided some continuous improvement skills training in the first ETP project. This training will focus on improvements related to product and process improvement and focus on more technical areas. The training will enable employees to resolve critical business issues and operational problems and communicate with customers worldwide providing solutions to maintain strong business relationships.

Advanced Technology: The focus of the advanced technology (AT) training will be the Endora system that will customize the internal computer systems to enable the employees to proficiently use computer technologies to perform their jobs. The AT training will include Endora technical skills for the key users and engineers. Training will also be needed for the reconfiguration of the production lines for communication with the Endora system.

Commitment to Training

Stryker Endoscopy representatives state that the company provides substantial training resources to ensure employees have the skills to do their job. The current training budget for non-ETP related training is \$345,000 (.92% of payroll). The company's ongoing training efforts include courses in literacy skills, new-hire orientation and training, compliance training, tuition reimbursement, degree programs, health and safety training, basic business skills, senior management training, and computer-based training.

Stryker Endoscopy states that this training is different in content and format to the company's current training and will prepare the workforce for emerging technologies and products in a global market. The company also states that the proposed training is more technically advanced and that all course content is different than provided previously. None of the employees have been trained on these new revisions or content. After its ETP Agreement ends, Stryker Endoscopy plans to provide ongoing product training.

SUBCONTRACTORS:

California Training Administration (San Jose, California) Project administration, for an amount not to exceed 10 percent of the payment earned.

Stryker Endoscopy is in the process of identifying and finalizing plans with a number of California-based vendors such as Stanford Medical Center, Santa Clara University, Motorola, Endora, and Oracle.

THIRD PARTY SERVICES:

California Training Administration (San Jose, California) assisted in the development of the ETP application at a cost of \$3,500.

ACTIVE PROJECTS:

The following are current project statistics:

ACTIVE PROJECTS						
Agreement Number	Agreement Amount	Term	Planned Number To Be Retained	Number Enrolled	Number Completed Training	Number Retained For 90 Days
ET05-0118	\$874,640	07/01/04 - 06/30/06	580	652	434	434

Stryker Endoscopy representatives are projecting 75% placement rate and a reimbursement rate of 47%. Stryker Endoscopy reports that lower reimbursement amount was due to several factors: First, production demands did not allow employees to be released for as many hours of training as originally planned. Second, the increase in production necessitated the hiring of temporary workers which were trained but were not eligible for ETP reimbursement. An additional 2,376 hours of training was conducted for 78 temporary employees some of whom were eventually hired by Stryker Endoscopy. Lastly, this was the first formal training program at Stryker Endoscopy and the company overestimated the number of hours that would be provided per employee during the term of the agreement. For its second project, Stryker Endoscopy representatives have designed a training program that is more conservative to ensure higher completion.

STRYKER ENDOSCOPY

MENU CURRICULUM

Class Lab Hours

(24-200 Hours)

Trainees will receive any of the following:

COMPUTER SKILLS

- Using Endora Computer System
- Computer Programming
- Software Development
- System Configuration
- Advanced Oracle
- Pro/E Wildfire
- Orcad Layout / Capture
- MiniTab (statistics)
- ClearCase / ClearQuest
- Parasoft C++ Test
- Certified Electronic Technicians (CET)
- American Society of Mechanical Drafters
- Lab NoteBook
- Simulation Tools:
(Ansys, Pspice, Zemax, Labview, Matlab, Pro/Cocept)
- Agilent Software
- IBM Rational Requisite Pro
- Prototype Development (SLA)
- Managing Materials & Services
- Demand Planning
- Supply Chain Metrics
- MicroSoft Office Tools
- Manufacturing Computers System
- OfficePACs (Picture Archive Comm. System)
- PACs Image Management Software

CONTINUOUS IMPROVEMENT

- CGMP - Clinical Good Manufacturing Practices
- IPC 610 - Institute for Printed Circuits
- Workmanship Standards
- Customer Satisfaction
- Service Contract Process
- Six Sigma
- Zero Defect / Kaizen / Lean
- Traceability
- Risk Management
- Audit Prep & Quality
- Breakthrough Project Management

STRYKER ENDOSCOPY

MENU CURRICULUM (continued)

Class Lab Hours
(24-200 Hours)

Trainees will receive any of the following:

CONTINUOUS IMPROVEMENT (continued)

- Project Review
- PreProduction Quality Assurance (PPQA) Review
- New Product Plan
- Functional Specs
- Risk Management
- Patent Search / Filing
- Verification / Validation
- Reliability Testing
- Sterility Assurance
- Cleanability
- Biocompatibility
- Quality Plans
- ECO Process (Engineering Change Orders)
- DFM / DFT Rework (Demand Flow Technology)
- Efficiency & Workflow
- Global Communications & Markets
- Technical Presentations
- Quality Systems & Documentation
- Team Meeting / Problem Solving
- Productivity Improvement
- Quality Inspection
- Leadership / Coaching Skills
 - - Getting started as a new leader
 - - Communications / Interaction Essentials
 - - Performance Management
 - - Coaching for Success & Improvement

STRYKER ENDOSCOPY

MENU CURRICULUM (continued)

Class Lab Hours
(24-200 Hours)

Trainees will receive any of the following:

MANUFACTURING SKILLS

- Manufacturing / Design Techniques:
 - - Sports Medicine Products
 - - Arthrosonics & Arthroscopic Technology
 - - Implant Technology
- Scopes, Monitors, LightSource, Drills
- ROHOS - Restricting of Hazardous Substances
- Clean Room (Titanium, Stainless Steel, Mercury, Lead)
- Starrad Machine (Product Cycle)
- Thermal Camera / Digital Imaging
- Packaging / Shipping (non-/Sterile, Adoption)
- Label Issuance & Controls
- Warehouse Stocking
- Materials Transfer
- Refurbishing / Repair
- Test Protocol / Test Report Format
- Technical Files Medical Device Directive (MDD)
- ESD (Electro-Static Discharge)
- Field Engineer Skills
- Micro Powered Instruments
- Digital Imaging
- EMR (Electronic Medical Records)
- ETrauma Products
- Artificial Disc Technology

ADVANCED TECHNOLOGY

- Endora System (Technical Skills):
 - - Programming
 - - System Configuration
 - - System Management
 - - Customization
 - - Strategic Planning
 - - Managing Capital Risk
 - - Master Data Management
 - - Generating Custom Reports
 - - System Logistics
 - - Material Management
 - - Queries / Operation
 - - Navigating

STRYKER ENDOSCOPY

MENU CURRICULUM (continued)

CBT Hours
(0-200 Hours)

Trainees will receive any of the following:

COMPUTER SKILLS (CBT)

- Accounts Payable / Receivable
- Advanced Stock Room / Pricing
- Advanced Shipping / Receiving / Supply Chain
- Awaiting Disposition
- Basic Navigation
- BOM (Bill of Materials)
- Cash Posting
- Cost Management / ECO(Electronic Change Order)
- Credit Returns
- Customer Quality
- Cycle Count
- Device History Record (DHR) Element
- ECO (Engineering / Electronic Change Order)
- EDI (Electronic Data)
- ENDORA Navigation
- Finance Reporting
- Fixed Assests
- General Ledger
- Health Care Services
- Incentive / Compensation
- Incoming Inspection
- Instarllled Base
- Inventory Concepts / WIP / Stock Room
- IProcurement / iSupplier
- Item Creation / Maintenance
- Kewil User Interface
- Logistics Reporting
- Materials / Procurement
- New Product Overview
- Non Conforming Parts / Returns
- Optics – C4 Training
- Oracle / Navigation
- Order Demand Planner / Management
- Outside Processing
- Planning Reports
- Project Costing / CER
- Purchase Order / Purchasing
- Quality Collection / Reporting

STRYKER ENDOSCOPY

MENU CURRICULUM (continued)

CBT Hours
(0-200 Hours)

Trainees will receive any of the following:

COMPUTER SKILLS (CBT) (continued)

- R&D Machine Shop Work Orders
- Repairs / Loaners / Service Contracts
- Resource / Territory Manager
- Samples / Skip Lot / Sampling Plan
- Shop Floor Execution

Comment: The parties agree that the training identified in this Curriculum may be revised from time-to-time during the term of this Agreement at the request of Contractor and with the prior written approval of ETP. (See also Section 12 in this Agreement.)